



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/016,955	12/13/2001	Robert Hundt	10019983-1	7361

7590 10/05/2004

HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER

NGUYEN BA, HOANG VU A

ART UNIT

PAPER NUMBER

2122

DATE MAILED: 10/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/016,955	HUNDT ET AL.
	Examiner	Art Unit
	Hoang-Vu A Nguyen-Ba	2122

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 13 December 2001.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-36 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-36 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 13 December 2001 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responsive to the application filed December 13, 2001.
2. Claims 1-36 have been examined.

Priority

3. The priority date considered for this application is December 13, 2001.

Oath/Declaration

4. The Office acknowledges receipt of a properly signed oath/declaration filed December 13, 2001.

Drawings

5. This application has been filed with informal drawings which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.

Claim Objection

6. Claim 17 is objected to because of the following informalities: the phrase “utilized by second a dynamically generated code” should be changed to – utilized by a second dynamically generated code –.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. § 112:
The specification shall conclude with one or more claims particularly

pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 9, 20, 28 and 34 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 20 (line 4), 28 (line 3) and 34 (line 2) recite the limitation “relevant machine context.” The modifier “relevant” is vague and thus indefinite because it is unclear which machine context is relevant and which one is not. Furthermore, it is not certain to which degree machine context becomes relevant.

Claim 9 recites a preamble that does not appear to be “necessary to give life, meaning and vitality to [the] claim.” *Pitney Bowes*, 51 USPQ2d at 1165-66, *Kroppa v Robie*, 88 USPQ 478, 480-481 (CCPA 1951). For art rejection purposes, the intended preamble is interpreted to be as follows: – An apparatus for registering dynamically generated code and corresponding unwind information, said apparatus comprising: –.

Double Patenting

9. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Long*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1993); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Voge*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminated disclaimer in compliance with 37 CFR 1.103(c) 1.321(c) may be used to overcome an actual or provisional rejection based on a

nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

10. Claims 1-36 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-21 of copending Application No. 10/016,948.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the subject matter claimed in copending Application No. 10/016,948 is merely an obvious variation of that claimed in the instant application. See following table.

Instant claim 13	Co-Application claim 1
<i>A computer-implemented method for registering dynamically generated code and corresponding unwind information, said method comprising:</i>	A computer-implemented method for lazily registering dynamically generated code and corresponding unwind information of a process, said method comprising:
	detecting a request for first unwind information related to first corresponding dynamically generated code;
<i>creating a module which includes data related to</i>	creating a module which includes data

<i>dynamically generated code and corresponding unwind information;</i>	related to said first unwind information and said first corresponding dynamically generated code;
<i>providing an application program interface which allows said data to be registered such that dynamic registration of said dynamically generated code and said corresponding unwind information is enabled;</i>	providing an application program interface which allows said data to be registered such that dynamic registration of said first unwind information and said first corresponding dynamically generated code is enabled; and
<i>coupling an application program interface invocation code sequence to said dynamically generated code such that upon execution of said dynamically generated code, said application program interface invocation code sequence instructs said application program interface to facilitate registration of said data.</i>	coupling an application program interface invocation code sequence to said first corresponding dynamically generated code such that upon execution of said corresponding dynamically generated code, said application program interface invocation code sequence instructs said application program interface to facilitate registration of said data.

As can be seen from the above table, the only difference between instant claim 13 and co-application claim 1 is the second limitation “detecting a request for first unwind information related to first corresponding dynamically generated code” in co-application claim 1. This step is deemed to be inherent to the teaching of the instant application because in order to have *data related to dynamically generated code and corresponding unwind information* a request for such data should have been made.

The same analysis also applies to the remaining independent claims of both applications.

Claim Rejections – 35 U.S.C. § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

12. Claims 1-36 are rejected under 35 U.S.C. § 102(b) as being anticipated by

i) Hundt, “**HP Caliper – An Architecture for Performance Analysis Tool,**” October 2000; and

ii) Cierniak-Lueh-Stichnoth, **Practicing JUDO: Java™ Under Dynamic Optimizations**, June 2000.

13. Claims 1-36 are rejected under 35 U.S.C. § 102(a) as being anticipated by the admitted prior art (**APA**) of pages 1-3 of applicants’ background.

Claims 1, 5 and 9

HP Caliper, Practicing Judo and APA disclose at least:

creating a module which includes data related to said dynamically generated code and said corresponding unwind information (see HP Caliper API; Practicing JUDO, Figure 1 and associated text, sections 3.1 and 3.2; APA, unwind descriptors at page 3); and

providing an application program interface which allows said data to be registered such that dynamic registration of said dynamically generated code and said corresponding unwind information is enabled (see HP Caliper API; Practicing JUDO, Figure 1 and associated text, sections 3.1 and 3.2, e.g., the JIT runtime interface; APA, page 3).

Claims 13, 21 and 29

Claims 13, 21 and 29 recite the same features of claims 1, 5 and 9 respectively. Therefore, the same rejections are applied. **HP Caliper, Practicing Judo and APA** further disclose *coupling an application program interface invocation code sequence to said dynamically generated code such that upon execution of said dynamically generated code, said application program interface invocation code sequence instructs said application program interface to facilitate registration of said data* (see **HP Caliper API; Practicing JUDO**, Figure 1 and associated text, sections 3.1 and 3.2, e.g., the JIT runtime interface; **APA**, page 3).

Claims 2, 6, 10, 14, 22 and 30

Rejections of base claims and intervening claims are incorporated. **HP Caliper, Practicing JUDO and APA** further disclose *wherein said module stores said data related to said dynamically generated code and said corresponding unwind information in a centralized location* (see **HP Caliper**'s shared memory; **Practicing JUDO**, Figure 2, e.g., “Profiling data representation” and associated text; **APA**, page 3, lines 16-19).

Claims 3, 7, 11, 15, 23, and 31

Rejections of base claims and intervening claims are incorporated. **HP Caliper, Practicing JUDO and APA** further disclose *wherein said dynamically generated code is comprised of instrumented code* (see **HP Caliper**, section 4; **Practicing JUDO**, section 5; **APA**, pages 1-3).

Claims 4, 8, 12, 16, 24 and 32

Rejections of base claims and intervening claims are incorporated. **HP Caliper, Practicing JUDO and APA** further disclose *wherein said application program interface allows said data to be registered by a dynamic loader* (see **HP Caliper**, section 3; **Practicing JUDO**, section 5; **APA**, pages 1-3).

Claims 17, 25 and 33

Rejections of base claims 13, 21 and 29 are incorporated. **HP Caliper, Practicing JUDO and APA** does not specifically disclose *wherein said application program interface invocation code sequence is utilized by second a dynamically generated code*. However, this feature is deemed inherent to the above teachings. Without this feature, the dynamic registration or optimization would be inoperative.

Claims 18, 26 and 34

Rejections of base claims are incorporated. Claims 18, 26 and 34 recite the same coupling step of claims 13, 21 and 29 respectively, therefore the same rejection are applied.

Claims 19, 27 and 35

Rejections of base claims 13, 21 and 29 are incorporated. **HP Caliper, Practicing JUDO and APA** does not specifically disclose *preventing registration of said module for a function called directly or indirectly via said application program interface*. However, this feature is deemed inherent to the above teachings. Without this feature, the dynamic registration or optimization would be inoperative.

Claims 20, 28 and 36

Rejections of base claims 13, 21 and 29 are incorporated. **HP Caliper, Practicing JUDO and APA** does not specifically disclose *saving and restoring relevant machine context upon entry and exit of said application program interface invocation code sequence*. However, this feature is deemed inherent to the above teachings. Without this feature, the dynamic registration or optimization would be inoperative.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoang-Vu "Antony" Nguyen-Ba whose telephone number is (703) 305-0103. The examiner can normally be reached on Tuesday-Friday, 6:00 to 16:15.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Dam can be reached on (703) 305-4552. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

After October 25, 2004, the Examiner can be reached at (571) 272-3701 and the Examiner's supervisor at (571) 272-3695.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR.

only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**ANTONY NGUYEN-BA
PRIMARY EXAMINER**

Art Unit 2122

September 28, 2004